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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,052	11/23/2001	Hajime Homma	041514-5368	4465

9629 7590 06/07/2005

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WASHINGTON, DC 20004

EXAMINER
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TRAN, HENRY N

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/992,052

Applicant(s)

HOMMA, HAJIME

Examiner

HENRY N. TRAN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-9 and 13-18 is/are allowed.
- 6) ☒ Claim(s) 1 and 11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office action is in response to the applicant's amendment received 1/18/05. The amendments to the claims have been entered. Claims 1-9 and 11-18 remain pending in this application. Applicant's remarks have been fully considered, with the results set forth as follows.

#### ***Claim Objections***

1. Claims 1, 11 and 14-16 are objected to because of the following informalities: editorial errors have been found as follows

In claims 1 and 11, on lines 2-3, the claimed limitations: "a pair of first electrodes and a second electrode arranged therebetween" should be changed to --a pair of a first electrodes electrode and a second electrode arranged therebetween--.

In claims 14-16, on lines 3, the claimed limitations: "when that electrode functions as" should be changed to --when ~~that~~ said electrode functions as--

Applicant is required to amend the claims for overcoming the objections in reply to this Office action.

For the purpose of this Office action, the examiner assumes that the above identified errors have been corrected as suggested above.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al (U.S. Patent No. 6,559,814, hereinafter referred to as "Kanazawa '814") in view of Kanazawa et al (U.S. Patent No. 5,835,072, hereinafter referred to as "Kanazawa '072").

Kanazawa '814 teaches methods for driving a plasma display panel (PDP) 40 having a plurality of row electrode sets, each of said sets including a pair of a first electrode, which is a scanning electrode Xi, and a second electrode, which is a sustain electrode Yj, arranged there between, said second electrode interposed between neighboring display cells corresponding to discharge cells, e.g., D1 ~D3, and wherein said neighboring display cells are adjacent in a direction intersecting with a direction where scanning electrodes and sustaining electrodes extend; the method comprising the step of: changing one condition consisting of voltage of a sustaining pulse, Vs, applied to the first electrode Xi and the second electrode Yj alternately in every subfields of a field having a predetermined number of subfields during a vertical scan cycle; see Figs. 1 and 2; and col. 4, lines 24-55.

However, Kanazawa '814 does not teach: (i) changing at least one condition of a voltage of a sustaining pulse being applied to said first electrode and second electrode alternately in every cycle by a predetermined number with relation to an image data during a sustaining period; and (ii) executing sustaining discharge of said neighboring display cells at an interval of one cycle alternately.

Kanazawa '072 teaches methods for driving a plasma display panel comprising the steps of: changing at least one condition of a voltage of a sustaining pulse being applied to said first

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electrode and second electrode (Y electrode and X electrode) alternately in every cycle by a predetermined number with relation to an image data (gray scale display data) during a sustaining period, such as: using a lower sustaining voltage, the duration of a sustaining pulse must be made longer, etc, see col. 2, lines 27-32; col. 5, line 67 to col. 6, line 5; col. 6, lines 52-55; col. 7, lines 15-23; col. 9, line 66 to col. 10, line 2; and col. 11, lines 28-38; and (ii) executing sustaining discharge of said neighboring display cells at an interval of one cycle alternately; see Fig. 12.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize one of the sustaining voltage changes as taught by Kanazawa '072 in the Kanazawa '814 methods because this would provide an improved PDP that displays high quality image; see Kanazawa '072, col. 7, lines 15.

Claims 1 and 11 are therefore rejected.

***Allowable Subject Matter***

4. Claims 2-9 and 13-18 are allowed.
5. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's amendments to claims 1, 8 and 11 and explanations to Figs. 3, 4, 10A, 10B, 12A and 12B of the instant application have overcome the objection to the drawings recited in the prior Office action.

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7. Applicant's arguments with respect to claims 1-9 and 11-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It's U.S. Patent No. 6,836,261 (Kishi et al) that teach a method of driving a PDP.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

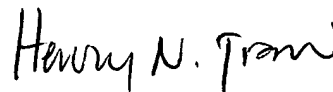
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **HENRY N. TRAN** whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK N. EDOUARD can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HENRY N TRAN  
Primary Examiner  
Art Unit 2674

6/3/05